Date: Wed, 26 May 93 11:58:53 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #644

To: Info-Hams

Info-Hams Digest Wed, 26 May 93 Volume 93 : Issue 644

Today's Topics:

2 Meters and Airlines
2M Repeater at Lake Mead?
Aluminum siding bad?
Anyone have BD distance calc?
Distance Calculations
G5RV

HamCom

HELP help . Vacum tube 5763.

Ic-251A interface to G3RUH 9600 baud modem help.

Nickel-hydride batteries (was Re: 3rd party vendors of HT batteries) (2 msgs)

Ouestion: Can a novice take the extra test?

Some advice on soldering coaxial cable

Touch Tone Frequencies VHF/UHF antennas (2 msgs)

VK2WI Weekly News, 16th May 1993

Want 2M/70CM antenna ideas for Caravan

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 21 May 93 10:13:00 GMT

From: usc!sdd.hp.com!spool.mu.edu!think.com!enterpoop.mit.edu!news.kei.com!ub!

dsinc!satalink!marc.snyder@network.UCSD.EDU

Subject: 2 Meters and Airlines

To: info-hams@ucsd.edu

Hypothetically then, what could you expect to hear on 2M at, say,

35,000 feet? I thought the aircraft's frame would absorb the signals anyway, unless you have an outside antenna. If not, wouldn't you be activating repeaters for hundreds of miles?

Marc - WA30KW - Cheltenham, PA (marc.snyder@satalink.com)

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... A friend in need is a pest!
___ Blue Wave/QWK v2.12
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Date: 26 May 93 14:31:25 GMT From: news-mail-gateway@ucsd.edu Subject: 2M Repeater at Lake Mead?

To: info-hams@ucsd.edu

My family will be renting a houseboat on Lake Mead for a few days this summer. Is there a 2-meter or 440 repeater that gives good coverage of the lake?

Larger Questions, in the "Too Late to Ask" category: Why are we going to Lake Mead in the first place? What is there to do on a houseboat? Is it really as unbearably hot as some folks say?

Date: Wed, 26 May 1993 13:32:57 GMT

From: news.acns.nwu.edu!casbah.acns.nwu.edu!rdewan@network.UCSD.EDU

Subject: Aluminum siding bad?

To: info-hams@ucsd.edu

In article <1ttmi9\$rrb@usenet.rpi.edu> maessm@rpi.edu writes:
>In article <1993May25.004733.24254@news.vanderbilt.edu>,
BIDDLEAP@ctrvax.Vanderbilt.Edu (Alan P. Biddle) writes:
>|> Hi,

>|>

>|> I am considering puting siding on a house, and am wondering if anyone >|> has any pro/con experience with aluminum siding. I can imaging all

A few lined deleted for brevity.

>I've found that putting the antenna opposite a window usually works best.

A slot antenna. The antenna tuner tunes the slot. So a tall window will have horizontal (electrical) polarization.

Rajiv aa9ch r-dewan@nwu.edu

Date: 26 May 93 12:16:33 GMT From: news-mail-gateway@ucsd.edu

Subject: Anyone have BD distance calc?

To: info-hams@ucsd.edu

In a recent posting, Bob Weir (WB5KXH) asked about the availability of BD, the high-accuracy bearing & distance program.

Along with Paul Wade, N1BWT, I'm the author of BD. I'll be happy to e-mail the source code to anyone who wants it. You'll need Turbo Pascal to compile it, however. If you want the executable file (plus source), write to Emil, W3EP. Include a disk w/postage or a few bucks.

73 - MRO

Michael R. Owen, Ph.D. Department of Geology St. Lawrence University Canton, NY 13617 (315) 379-5975

Canton, NY 13617 (315) 379-0161 (6-9pm) voice -(315) 379-5804

a.k.a.: W9IP

Northern Lights Software

Star Route, Box 60

e-mail: MOWE@SLUMUS FAX

Date: 26 May 93 13:19:56 GMT From: news-mail-gateway@ucsd.edu Subject: Distance Calculations

To: info-hams@ucsd.edu

Bob Wier, East Texas State U., Commerce, Texas wier@merlin.etsu.edu (watch for address change)

asks:

- > I note from the June 1993 QST that a much more
- > accurate formula to calculate earth distances is
- > now available in the public domain for noncommercial
- > purposes (Page 96). I't called BD (Bearing and Distance).
- > Anyone know where to get it from the net?

I am led to believe that the results from "BD" may not be much different from the oblate-spheroid earth model used in the "World Above 50 MHz" distance calculations for the past 15 years or so. The earlier model was furnished by Dick Allen, W5SXD. Maybe he could help you. It would be interesting if someone could post a comparison of the results.

73, Bob W30TC

Date: Wed, 26 May 1993 13:38:00 GMT

From: news.acns.nwu.edu!casbah.acns.nwu.edu!rdewan@network.UCSD.EDU

Subject: G5RV

To: info-hams@ucsd.edu

In article <930525132331_47@ccm.hf.intel.com> Cecil_A_Moore@ccm.hf.INTel.COM
 (Cecil A Moore) writes:

>>Measured at the transmitter end, the SWR will appear low because >>the relections have been gobbled up by the loss present in coax.

>>

>>Ed W1AAZ

>

>Ed, As you probably know, "G5RV" is a generic term and doesn't

I wonder how G5RV would feel about this. Generic term.

He was on last week at 0400Z at the bottom end of 20m.

Rajiv aa9ch

Address: r-dewan@nwu.edu Phone: None. Only CW.

Date: 26 May 93 14:29:19 GMT From: news-mail-gateway@ucsd.edu

Subject: HamCom

To: info-hams@ucsd.edu

oo7@astro.as.utexas.edu (Derek Wills) writes:

```
>marcbg@feenix.metronet.com (Marc Grant) advertises:
>
>>>HAM-COM 1993 BEGINS FRIDAY, JUNE 4 AND CONTINUES UNTIL SUNDAY, JUNE 7.
>
    Yessir, folks, we Texans have the loooongest days. It's
> something to do with things expanding in the summer heat.
> In other parts of the country, Sunday is June 6, but we
> are a little behind the times here, pardners. Heh heh...
>
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Actually, the days *are* getting longer. There is another leap second June 30; and not just in Texas! If the definition of the length of the day isn't adjusted, we'll be adding 2 leap seconds per year by 2000!

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Kerry Kingham WA4BQM | Internet: kak@CygX3.usno.navy.mil
U.S. Naval Observatory
Washington, D.C.
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Date: 26 May 1993 14:23:50 GMT

From: swrinde!elroy.jpl.nasa.gov!news.larc.nasa.gov!grissom.larc.nasa.gov!

kludge@network.UCSD.EDU

Subject: HELP help . Vacum tube 5763.

To: info-hams@ucsd.edu

In article <199305260600.AA00380@tilde.csc.ti.com> dube@cpdvax.CSc.ti.COM writes: >Bobba Claudio requested info on the 5763. Here 'tis from the Sylvania >Technical Manual (1970):

>5763 Beam Pentode Base Diagram 9K Heater volts 6.0 Heater current .75 amps >Use: RF Amp (for 10.3 watts: Plate dissipation: 13.5W Plate volts 350 >Neg grid volts 37 Screen volts 250 Plate current 48.5 mA Screen current >6.2 mA) and (for 12 watts: Plate dissipation 12W Plate volts 300 Neg >grid volts 37.5 screen volts 250 plate current 50 mA Screen current >6.6 mA)

This isn't really a very good tube for audio work, but you often see them used in PA amplifiers, AM modulator stages, and the like. The low-level nonlinearity is a bit of a problem.

At RF, though, it's not half bad. It's got a low enough internal capacitance that it does a good job for low power operation. I wouldn't hesitate using it in new designs.

⁻⁻scott

- -

"C'est un Nagra. C'est suisse, et tres, tres precis."

Date: Wed, 26 May 1993 15:28:54 GMT

From: mvb.saic.com!unogate!news.service.uci.edu!usc!zaphod.mps.ohio-state.edu!cs.utexas.edu!utnut!torn!nott!cunews!freenet.carleton.ca!Freenet.carleton.ca!ae517@network.UCSD.EDU

Subject: Ic-251A interface to G3RUH 9600 baud modem help.

To: info-hams@ucsd.edu

Does anyone know the details for interfacing the G3RUH 9600 baud modem to the Ic-251A all-mode transceiver? I have found the discriminator point, and am reasonably sure I know where to connect the txd to the fm reactance modulator, but why reinvent the wheel? Also, when I do get this puppy up and running, what would be the rx/tx swtiching time of the rig so I can set up my parms? tnx in advance de ve3uav ae517@freenet.carleton.ca

Date: 26 May 1993 11:38:28 GMT

From: usc!elroy.jpl.nasa.gov!news.larc.nasa.gov!arbd0.larc.nasa.gov!

zawodny@network.UCSD.EDU

Subject: Nickel-hydride batteries (was Re: 3rd party vendors of HT batteries)

To: info-hams@ucsd.edu

In article <01GYM3BBGEKYJRP57W@tntech.edu> RPH0470@tntech.EDU (Richard Hosker)
writes:

><mwiz@austin.ibm.com> asks:

>

>> What kind of charger does it take to charge these batteries? Can one use >> an existing rapid charger?

>

>You can use any existing nicad charger. The NiMH cells are supposedly >happiest with a 110 mA chaarge current, but can deal with anything from zero >to 300+ mA. Most "rapid" chargers supply 150-200 mA; this should work.

>

>Richard Hosker rph0470@tntech.edu

Well naturally, the charging current depends upon the capacity of the cells. For NiCd cells the standard rate is C/10 (or 100mA for a 1 Amp-Hr cell). I agree that the most common cell used on hobbying is probably near 1 Amp-Hr but, just thought we should be more general here.

Joseph M. Zawodny (KO4LW) NASA Langley Research Center Internet: zawodny@arbd0.larc.nasa.gov MS-475, Hampton VA, 23681-0001 Packet: ko4lw@wb0tax.va.usa Date: 26 May 1993 09:06:42 -0400 From: netnews!panix!panix!not-for-mail@nyu.arpa Subject: Nickel-hydride batteries (was Re: 3rd party vendors of HT batteries) To: info-hams@ucsd.edu In article <01GYM3BBGEKYJRP57W@tntech.edu> RPH0470@tntech.EDU (Richard Hosker) writes: ><mwiz@austin.ibm.com> asks: >> What kind of charger does it take to charge these batteries? Can one use >> an existing rapid charger? > >You can use any existing nicad charger. The NiMH cells are supposedly >happiest with a 110 mA chaarge current, but can deal with anything from zero >to 300+ mA. Most "rapid" chargers supply 150-200 mA; this should work. I've tried brand new Gold Peak 1100 mAH NiMH cells using a variety of slow and fast chargers, including the NiCD circuit in a couple of scanners. No go. You get about 300 mAH out of them, and they self-discharge in a few days. Mike Schuster schuster@panix.com | 70346.1745@CompuServe.COM -----| schuster@shell.portal.com | GEnie: MSCHUSTER ______ Date: 26 May 93 10:13:20 EDT From: mvb.saic.com!unogate!news.service.uci.edu!usc!zaphod.mps.ohio-state.edu! uwm.edu!caen!nic.umass.edu!news.mtholyoke.edu!eddie.mit.edu!news.intercon.com! psinntp!arrl.org@network.UCSD.EDU Subject: Question: Can a novice take the extra test? To: info-hams@ucsd.edu In rec.radio.amateur.misc, kchen@apple.com (Kok Chen) writes: >jmcoving@unccsun.uncc.edu (John Covington WN4BBJ) writes:

>>In article <1tjbru\$1rm@charm.magnus.acs.ohio-state.edu> ksampath@magnus.acs.ohio-state.edu (Krishna S Sampath) writes:

>>>the subject says it. assuming that the novice has 20 wpm cw, can the ham

```
>>>take the extra test?
>>Anyone, even an unlicensed person, that is elgible to be an Amateur Radio
>>Operator can take the Extra test. It used to be that you had to hold a
>>General or Advanced license for 2 years before you could take the Extra,
>>but that requirement was done away with about 1976. If you're ready go
>>ahead and take the test!
>
>The local ARRL-VEC-affiliated VEs would not administer the Extra written
>unless there is proof that you have passed the Advanced written.
>is nothing to stop one from taking all the written tests, starting from
>the Novice written, in a single sitting.
>However, they will administer the 20 wpm code test without your having
>passed the 13 wpm, or even the 5 wpm. In fact, they seem to encourage
>people to try for the higher code speeds anyway, since many people seem
>to be capable of faster code than they imagined.
>73,
>Kok Chen, AA6TY
                                kchen@apple.com
>Apple Computer, Inc.
I've seen several other postings that also indicate you must pass one exam
element before you can take the next. This *USED TO BE THE CASE* but it
```

element before you can take the next. This *USED TO BE THE CASE* but it is no longer true! The FCC doesn't care what order you take, or pass the exam elements in. They only care that you pass the necessary elements for a particular license. So, for example, if the Novice takes and passes elements 1C, 3A, 3B and 4B, but fails the 4A exam, the candidate ends up with a General license, until he or she later passes the Element 4A exam, at which point they end up with an Amateur Extra license.

The sixth edition of the ARRL/VEC Volunteer Examiner Manual addresses this, by saying, "At the team's discretion, elements may be administered out of order." (page 55) Unfortunately (at least IMHO) the manual also states, "we would still recommend that the examinee must first retake the failed element and pass it before proceeding to take a higher examination element." (page 51)

Notice there is *NO* regulatory basis for this "recommendation" and if a candidate goes into a session feeling prepared to take all the written exams, I see no reason they should not continue even though they do not pass an earlier element. This will allow them to concentrate later on the element they still need to pass, and will also give them the test-taking experience. The final decision does rest with the Volunteer Examining Team, however.

Larry Wolfgang, WR1B	lwolfgan@arrl.org	
Senior Assistant Technical Editor	arrlhq!lwolfgan	
ARRL		
225 Main Street	If you find someone who always	
Newington, CT 06111-1494	agrees with you, don't trust him.	
(203) 666-1541 (Voice)	He'll probably lie about other	
(203) 665-7531 (FAX)	things, too.	

Date: 26 May 1993 07:28 EDT

From: usc!howland.reston.ans.net!darwin.sura.net!ra!cs.umd.edu! skates.gsfc.nasa.gov!nssdca.gsfc.nasa.gov!stocker@network.UCSD.EDU

Subject: Some advice on soldering coaxial cable

To: info-hams@ucsd.edu

If someone could take the time to email me some advice on soldering connectors onto coaxial cable I would appreciate it.

I know how to prepare the cable for soldering and know to tin the shielding before soldering. However, I have the following specific areas that I would like to get someone's opinion who has done a bunch of this type of soldering:

- 1) Will a 35W iron be enough to heat both the connector and the shielding so that the solder will flow well.
- 2) Is there an easy way to tell when the connector is hot enough before the insulation starts to "flow"
- 3) I had someone tell me that I shouldn't attempt to flow solder in all the solder holes on the connector for the shielding. Is there a minimum number that must be soldered.

Thanks for any advise you can pass on.

Erich

Date: Wed, 26 May 1993 10:17:08 GMT From: pacbell.com!barrnet.net!infoserv!lila!dorsey@network.UCSD.EDU Subject: Touch Tone Frequencies To: info-hams@ucsd.edu I need to know the touch tone frequencies corresponding to the digits 0-9 and A-D for a project. Can anyone tell me what they are? Bill Dorsev "Give me your tired, your poor, I'll piss on 'em dorsey@lila.com That's what the Statue of Bigotry says." PGP 2.x public -- Lou Reed key on request Date: 26 May 93 14:31:54 GMT From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!newsfeed-1.peachnet.edu!concert!duke!news.duke.edu!ee.egr.duke.edu! jbs@network.UCSD.EDU Subject: VHF/UHF antennas To: info-hams@ucsd.edu In article <C7Lyw3.G2t@news.rich.bnr.ca> debaker@bnr.ca (David Baker) writes: <Mike Blackwell (mkb@cs.cmu.edu) wrote: <> <> Second, I'd like to purchase a better antenna for a 2m HT. Something <> that collapses, like a telescoping whip, would be ideal. I'd also like <> the option to come off the radio at 90 degrees, maybe just using a <> right angle BNC adapter (any potential problems here?). Any <> suggestions for an antenna? <I have used the ANLI 800 antenna (I believe it is the AL-800 to be exact) with <my dual band HT, and I believe it is a great antenna. I'll second that, though it seems to go for around \$35 here rather than \$40. It outperforms my 5/8 wave magnet-mount antenna (which admittedly has about 10 feet of unknown-quality RG-58 on it) by quite a large margin. -joe KD4LLV You spend the night

Like you were spending a dime

- Lyle Lovett

Date: 26 May 93 15:31:34 GMT From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!news.acns.nwu.edu! casbah.acns.nwu.edu!rdewan@network.UCSD.EDU Subject: VHF/UHF antennas To: info-hams@ucsd.edu In article <15386@news.duke.edu> jbs@ee.egr.duke.edu (Joe B. Simpson) writes: >In article <C7Lyw3.G2t@news.rich.bnr.ca> debaker@bnr.ca (David Baker) writes: ><Mike Blackwell (mkb@cs.cmu.edu) wrote:</pre> ><> ><> Second, I'd like to purchase a better antenna for a 2m HT. Something ><> that collapses, like a telescoping whip, would be ideal. I'd also like ><> the option to come off the radio at 90 degrees, maybe just using a ><> right angle BNC adapter (any potential problems here?). Any ><> suggestions for an antenna? ><I have used the ANLI 800 antenna (I believe it is the AL-800 to be exact) with ><my dual band HT, and I believe it is a great antenna. >I'll second that, though it seems to go for around \$35 here rather than \$40. >It outperforms my 5/8 wave magnet-mount antenna (which admittedly has about

For those of you who are not familiar with the ANLI 800 kit:

>10 feet of unknown-quality RG-58 on it) by quite a large margin.

It comes in three parts:

- 1. A coil encased in a plastic cylinder with a BNC on one end and a threaded stud on the other end.
- 2. A three inch long flexible whip that threads on the end of the coil
- 3. A 2 1/2' telecopic whip that also thread on at the end of the coil. This is 1/2 w on 2m and 2 stacked 5/8 w on 440. It is light and seems to not too stressful for the HT.

So you can use either the flexible whip or the telescopic antenna with the coil connector assembly.

I purhcased it at Dayton for \$36 and did some tests with a friend in the HARA arena while I was in a parking lot about a mile away. We did these tests in the 70cm band.

Reports:

The ICOM FL1443B (? - the whip that comes with a W2A - reportedly a good

one). Noisy and signal was not strong enough to override the other signals.

The ANLI 800 flexible whip - Full Queiting. The ANLI 800 telescopic whip - Full Queiting.

I have no connection with ANLI except that my HT is connected to an ANLI 800 antenna and I like it. I do not use the ICOM antenna any more. I usually keep the ANLI800 flexible whip on the HT.

Rajiv aa9ch

Address: r-dewan@nwu.edu
Phone: None on HF. Only CW.

Date: 26 May 93 09:09:48 GMT

From: munnari.oz.au!mel.dit.csiro.au!its.csiro.au!dmssyd.syd.dms.CSIRO.AU!

news.cs.uow.edu.au!mippet.ci.com.au!eram!dave@network.UCSD.EDU

Subject: VK2WI Weekly News, 16th May 1993

To: info-hams@ucsd.edu

[These snippets were gleaned from the packet radio network; they appear to be the only machine-readable record of the VK2WI Broadcast now.]

Two Kenwood rigs won in WIA membership campaign.

The Prizes for the WIA NSW Divion's membership recruitment and retention campaign were drawn by Mr Joshua Mui of Kenwood at the Division's annual general meeting on Sunday 9th May.

Second prize of a Kenwood TH-28A two mwtre handheld treansceiver was won by Mr N.F. Black VK2TNB of Blakehurst.

First prize of a TM-732A dual-band two metre/70 cm rig was won by Mr J.H. Willmott VK2AJX, from Bowral.

The promotion campaign achieved it's purpose. The goal was to boost membership by recruiting new members and retaining existing members where, in recent years, membership has been falling. The target was a net gain of 100 members.

By the end of the promotion, conducted over December last year through February this year, membership had risen by a total of 102 members above forecast. The NSW Division now has the highest membership of all Divisions, standing at 1714 as at the end of March.

Space News.

The French Arsene satellite was successfully launched from the Korou space centre in French Guiana on Wednesday, May 12.

However, disappointingly, it seems to have suffered a serious failure, according to a report dated May 13.

Jean Gruau. F8ZS, President of the Radio Amateur Club de L'espace, said: "a signal is coming from Arsene, but it is extremely weak and not serviceable."

It was speculated the problem could be improper antenna orientation or a power system failure.

Astra, the commercial satellite that was launced with Arsene, is functioning normally.

Amateur radio publicity dispells the myths.

A story on page 15 of the Sydney Morning Herald for Saturday 15 May should go a long way towards correcting public perceptions of radio amateurs as cranks who listen to crackly transmissions on shortwave between bouts of eavesdropping on salacious royal phone calls.

The article explains how John Simon VK2XGJ was awaiting news of the launch of the latest packet radio satellite, Arsene.

Written by Herald staff journalist, Richard Macey, the article is accompanied by a picture of John in his "shack". A keyboard and computer monitor are in prominent view among the transceivers, but there's not a microphone in sight!

Macey clearly explains packet radio in laymen's terms, after telling readers that "amateur radio enthusiasts have come a long way since the days of huddling over crackling wirelesses..."

International News

The US government plans to auction two large segments of the radio spectrum between 1.8 and 2.2 Gigahertz (GHz).

The auction scheme is apparently part of a plan to cut the government's budget deficit.

The auctions have been approved by a committee of the congress, while companion plans are passing through the US senate.

President Clinton approves the auctions shceme, which practically guarantees they will be passed, according to reports.

The auctions are forecast to return some seven billion dollars U.S. to the American government.

New Divisional Council elected.

Elections for the 1993-94 Council of the WIA NSW Division saw the following candidates elected:

Sandy Brucesmith VK2AD

Roger Harrison VK2ZTB

Roger Henley VK2ZIG

Julie Kentwell VK2XBR

Bob Lloyd-Jones VK2YEL

Tim Mills VK2ZTM

Erich Reimann VK2WH

John Robinson VK2XY

and

Terry Ryeland VK2UX

[Written by R.Harrison VK2ZTB, posted to packet by J.Robinson VK2XY]

- -

Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.2 dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

Date: 26 May 93 12:52:00 GMT From: news-mail-gateway@ucsd.edu

Subject: Want 2M/70CM antenna ideas for Caravan

To: info-hams@ucsd.edu

I use a Larsen dual-band antenna mounted using an "L" bracket on the driver-side right fender. Another Caravan-owning ham I know uses a small

dual-band (diamond? about 8" long) antenna mounted with a whole drilled in the roof. I rejected that idea cuz I wanted to put large things on the roof-top luggage carrier.

73,	Tom	N9CGD	

End of Info-Hams Digest V93 #644 ***********